09/746,742

(FILE 'HOME' ENTERED AT 08:41:27 ON 01 MAR 2004)

FILE 'CAPLUS, EMBASE, BIOSIS, MEDLINE, WPIDS' ENTERED AT 08:41:36 ON 01 MAR 2004

L1	466	S	(ECKERT, D? OR ECKERT D?)/AU,IN
L2	3864	S	(CHAN, D? OR CHAN D?)/AU,IN
L3	166	S	(MALASHKEVICH, V? OR MALASHKEVICH V?)/AU,IN
L4	4021	S	(KIM, P? OR KIM P?)/AU,IN
L5	1475	S	(CARR, P? OR CARR P?)/AU,IN
L6	14	S	(WHITEHEAD)(3A)(BIOMED?)
L7	13	DUP REM	L6 (1 DUPLICATE REMOVED)
L8	2	S	L1 AND L2 AND L3 AND L4 AND L5
L9	1	DUP REM	L8 (1 DUPLICATE REMOVED)
L10	9884	S	L1 OR L2 OR L3 OR L4 OR L5
L11	290	S	L10 AND (HIV?)
L12	83	S	L11 AND (FUSE? OR FUSION?)
L13	71	S	L12 AND (COIL? OR TRIMER? OR HELIX? OR HELIC?)
L14	23	DUP REM	L13 (48 DUPLICATES REMOVED)
L15	2162	S	(TRIMER?)(2A)(COMPLEX?)
L16	153	S	L15 AND (FUSE? OR FUSION?)
L17	33	S	(HELIX? OR HELIC?) AND L16
L18	14	DUP REM	L17 (19 DUPLICATES REMOVED)
L19	12	S	L18 NOT L14

=>

L14 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 19
AB Infection with **HIV**-1 is initiated by **fusion** of cellular and viral membranes. The gp41 subunit of the **HIV**-1 envelope plans a major role in this process, but the structure of gp41 is unknown. The authors have identified a stable, proteinase-resistant structure comprising two peptides, N-51 and C-43, derived from a recombinant protein fragment of the gp41 ectodomain. In isolation, N-51 is predominantly aggregated and C-43 is unfolded. When mixed, however, these peptides associate to form a stable, α- **helical**, discrete **trimer** of heterodimers. Proteolysis expts. indicate that the relative orientation of the N-51 and C-43 **helixes** in the complex is antiparallel. The authors propose that N-51 forms an interior, parallel, homotrimeric, **coiled-coil** core, against which three C-43 **helixes** pack in an antiparallel fashion. The authors suggest that this α- **helical**, **trimeric** complex is the core of the **fusion**-competent state of the **HIV**-1 envelope.

=> d 22

L14 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 19
AN 1995:989556 CAPLUS
DN 124:24301
TI A **trimeric** structural domain of the **HIV**-1 transmembrane glycoprotein
AU Lu, Min; Blacklow, Stephen C.; **Kim, Peter S.**
CS Howard Hughes Medical Institute, Massachusetts Institute Technology, Cambridge, MA, 02142, USA
SO Nature Structural Biology (1995), 2(12), 1075-82
CODEN: NSBIEW; ISSN: 1072-8368
PB Nature Publishing Co.
DT Journal
LA English

L14 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 18
AN 1997:274285 CAPLUS
DN 126:340142
TI Core structure of gp41 from the **HIV** envelope glycoprotein
AU **Chan, David C.**; Fass, Deborah; Berger, James M.; **Kim, Peter S.**
CS Whitehead Inst. Biomed. Res., Cambridge, MA, 02142, USA
SO Cell (Cambridge, Massachusetts) (1997), 89(2), 263-273
CODEN: CELLB5; ISSN: 0092-8674
PB Cell Press
DT Journal
LA English

=> d 21 ab

L14 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 18
AB The envelope glycoprotein of human immunodeficiency virus type 1 (**HIV**-1) consists of a complex of gp120 and gp41. The gp120 dets. viral tropism by binding to target-cell receptors, while gp41 mediates **fusion** between viral and cellular membranes. Previous studies identified an α- **helical** domain within gp41 composed a **trimer** of two interacting peptides. The crystal structure of this complex, composed of the peptides N36 and C34, is a six-**helical** bundle. Three N36 **helixes** form an interior, parallel **coiled-coil trimer**, while three C34 **helixes** pack in an oblique, antiparallel manner into highly conserved, hydrophobic grooves on the surface of this **trimer**. This structure shows striking similarity to the low-pH-induced conformation of influenza hemagglutinin and likely represents the core of **fusion**-active gp41. Avenues for the design/discovery of small-mol. inhibitors of **HIV** infection are directly suggested by this structure.

09/746,742

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      (FILE 'HOME' ENTERED AT 07:36:55 ON 01 MAR 2004)

      FILE 'REGISTRY' ENTERED AT 07:37:19 ON 01 MAR 2004
L1           19 S RMKQIEDKIEEIESKQKKIENEIARIKK/SQSP

      FILE 'CAPLUS' ENTERED AT 07:37:50 ON 01 MAR 2004
L2            6 S L1

      FILE 'REGISTRY' ENTERED AT 07:40:10 ON 01 MAR 2004
L3            2 S (LLXLTVWGXKXLQXRXX)/SQSP

      FILE 'CAPLUS' ENTERED AT 07:40:35 ON 01 MAR 2004
L4            2 S L3
L5        50965 F HIS
L6            2 S L2 AND L3

      FILE 'REGISTRY' ENTERED AT 07:42:30 ON 01 MAR 2004
L7         1170 S (SGIVQQQNNLLRAIEAQQHLLQLT)/SQSP

      FILE 'CAPLUS' ENTERED AT 07:43:01 ON 01 MAR 2004
L8          201 S L7
L9            7 S L8 AND (COIL?) AND (TRIMER?)
L10          25 S L8 AND (HELIX? OR HELIC?)
L11          13 S L8 AND MODEL?

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L2 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:261952 CAPLUS
DN 138:283697
TI Anti-fusion assay for inhibitors of HIV gp41env-mediated membrane fusion based on association of peptide fragments measured by capillary zone electrophoresis
IN Xie, Dong; Erickson, John W.; Grulich, Paul
PA Tibotec Pharmaceuticals Ltd., Ire.
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003027255	A2	20030403	WO 2002-US30611	20020927
	WO 2003027255	A3	20030522		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2001-324948P P 20010927
OS MARPAT 138:283697

L2 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:240811 CAPLUS
DN 136:275140
TI Fusion protein comprising coiled-coil domain and HIV gp41 protein N-terminal region as potent inhibitor of HIV entry
IN Eckert, Debra M.; Suntoke, Tara R.; Kim, Peter S.
PA Whitehead Institute for Biomedical Research, USA
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002024735	A2	20020328	WO 2001-US29637	20010921
	WO 2002024735	A3	20030814		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	AU 2001092944	A5	20020402	AU 2001-92944	20010921
	EP 1353942	A2	20031022	EP 2001-973355	20010921

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRAI US 2000-668072 A1 20000922

WO 2001-US29637 W 20010921

L2 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:728945 CAPLUS
DN 136:128622
TI Design of potent inhibitors of HIV-1 entry from the gp41 N-peptide region
AU Eckert, Debra M.; Kim, Peter S.
CS Howard Hughes Medical Institute, Whitehead Institute for Biomedical Research, Department of Biology, Massachusetts Institute of Technology, Cambridge, MA, 02142, USA
SO Proceedings of the National Academy of Sciences of the United States of America (2001), 98(20), 11187-11192
CODEN: PNASA6; ISSN: 0027-8424
PB National Academy of Sciences
DT Journal
LA English
RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:270960 CAPLUS
DN 135:40506
TI Thermodynamics of Peptide Inhibitor Binding to HIV-1 gp41
AU Cole, James L.; Garsky, Victor M.
CS Department of Antiviral Research and Department of Medicinal Chemistry, Merck Research Laboratories, West Point, PA, 19486, USA
SO Biochemistry (2001), 40(19), 5633-5641
CODEN: BICHAW; ISSN: 0006-2960
PB American Chemical Society
DT Journal
LA English
RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:98600 CAPLUS
DN 132:161230
TI Inhibitors of HIV membrane fusion, and identification method
IN Eckert, Debra M.; Chan, David C.; Malashkevich, Vladimir; Carr, Peter A.; Kim, Peter S.
PA Whitehead Institute for Biomedical Research, USA
SO PCT Int. Appl., 147 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000006599	A1	20000210	WO 1999-US17351	19990730
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2338022	AA	20000210	CA 1999-2338022	19990730
	EP 1100818	A1	20010523	EP 1999-937691	19990730
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 2002077284	A1	20020620	US 2000-746742	20001221
PRAI	US 1998-94676P	P	19980730		
	US 1998-100265P	P	19980914		
	US 1998-101058P	P	19980918		
	US 1999-132295P	P	19990503		
	US 1997-43280P	P	19970417		

WO 1999-US17351 W 19990730
OS MARPAT 132:161230
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:673921 CAPLUS
DN 132:30361
TI Inhibiting HIV-1 entry: discovery of D-peptide inhibitors that target the gp41 coiled-coil pocket
AU Eckert, Debra M.; Malashkevich, Vladimir N.; Hong, Lily H.; Carr, Peter A.; Kim, Peter S.
CS Howard Hughes Medical Institute Whitehead Institute for Biomedical Research Department of Biology, Nine Cambridge Center, Massachusetts Institute of Technology, Cambridge, MA, 02142, USA
SO Cell (Cambridge, Massachusetts) (1999), 99(1), 103-115
CODEN: CELLB5; ISSN: 0092-8674
PB Cell Press
DT Journal
LA English
RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:240811 CAPLUS
DN 136:275140
TI Fusion protein comprising coiled-coil domain and HIV gp41 protein N-terminal region as potent inhibitor of HIV entry
IN Eckert, Debra M.; Suntoke, Tara R.; Kim, Peter S.
PA Whitehead Institute for Biomedical Research, USA
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002024735	A2	20020328	WO 2001-US29637	20010921
	WO 2002024735	A3	20030814		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2001092944	A5	20020402	AU 2001-92944	20010921
	EP 1353942	A2	20031022	EP 2001-973355	20010921
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	US 2000-668072	A1	20000922		
	WO 2001-US29637	W	20010921		

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:98600 CAPLUS
DN 132:161230
TI Inhibitors of HIV membrane fusion, and identification method
IN Eckert, Debra M.; Chan, David C.; Malashkevich, Vladimir; Carr, Peter A.; Kim, Peter S.
PA Whitehead Institute for Biomedical Research, USA
SO PCT Int. Appl., 147 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000006599	A1	20000210	WO 1999-US17351	19990730
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2338022	AA	20000210	CA 1999-2338022	19990730
	EP 1100818	A1	20010523	EP 1999-937691	19990730
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 2002077284	A1	20020620	US 2000-746742	20001221
PRAI	US 1998-94676P	P	19980730		
	US 1998-100265P	P	19980914		
	US 1998-101058P	P	19980918		
	US 1999-132295P	P	19990503		
	US 1997-43280P	P	19970417		
	WO 1999-US17351	W	19990730		

L10 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:821564 CAPLUS
DN 133:360273
TI Crystal structure of the α- **helical** core domain of gp41 from the HIV envelope glycoprotein
IN Chan, David C.; Fass, Deborah; Lu, Min; Berger, James M.; Kim, Peter S.
PA Whitehead Institute for Biomedical Research, USA
SO U.S., 32 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6150088	A	20001121	US 1998-62241	19980417
	US 6506554	B1	20030114	US 2000-484925	20000118
	US 2003099935	A1	20030529	US 2002-200007	20020718
PRAI	US 1997-43280P	P	19970417		
	US 1998-62241	A3	19980417		
	US 2000-484925	A1	20000118		

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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